

# **REGIUS MODEL 110**

## **Overview and product concepts**

Healthcare Sales Headquarters  
International Marketing Division  
Product Managing Group  
KONICA MINOLTA Medical & Graphic, INC

# Family of Our CR products

## Controllers



**CS-3**



**CS-2**

## CR Scanners



**REGIUS model 370/570**



**REGIUS model 190**

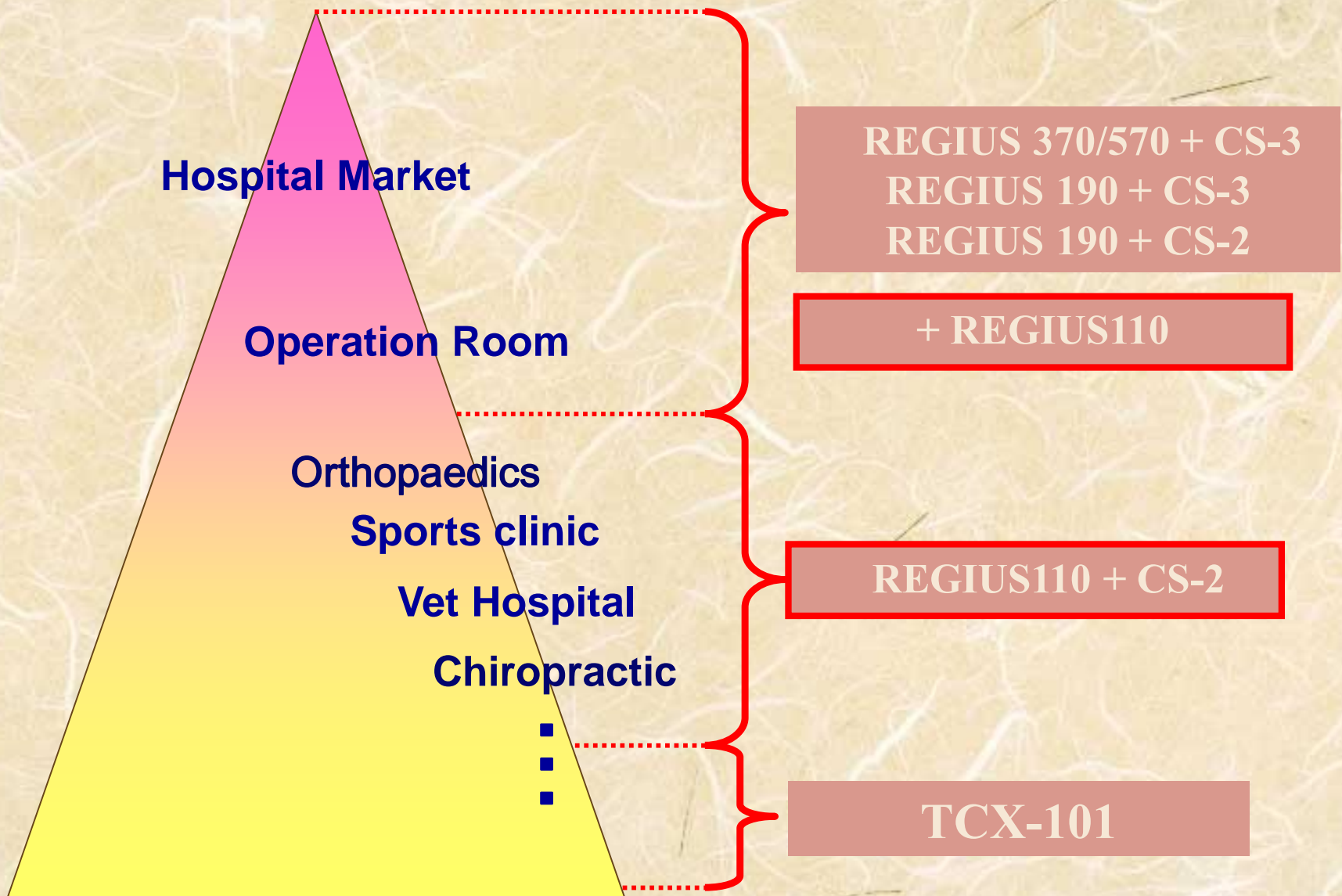


**REGIUS model 110**

*new product*



# Market Segmentation



# Extended System

## Main Department



## Dental



REGIUS 110 provide extensibility to existing system.



# Small System



**CS2 + REGIUS 110**  
**Suitable for small site.**

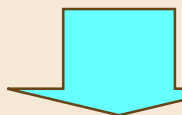


# Aspect

【Footprint】

REGIUS190

(0.34m<sup>2</sup>)



REGIUS

(0.27m<sup>2</sup>)

**COMPACT!!**

1227

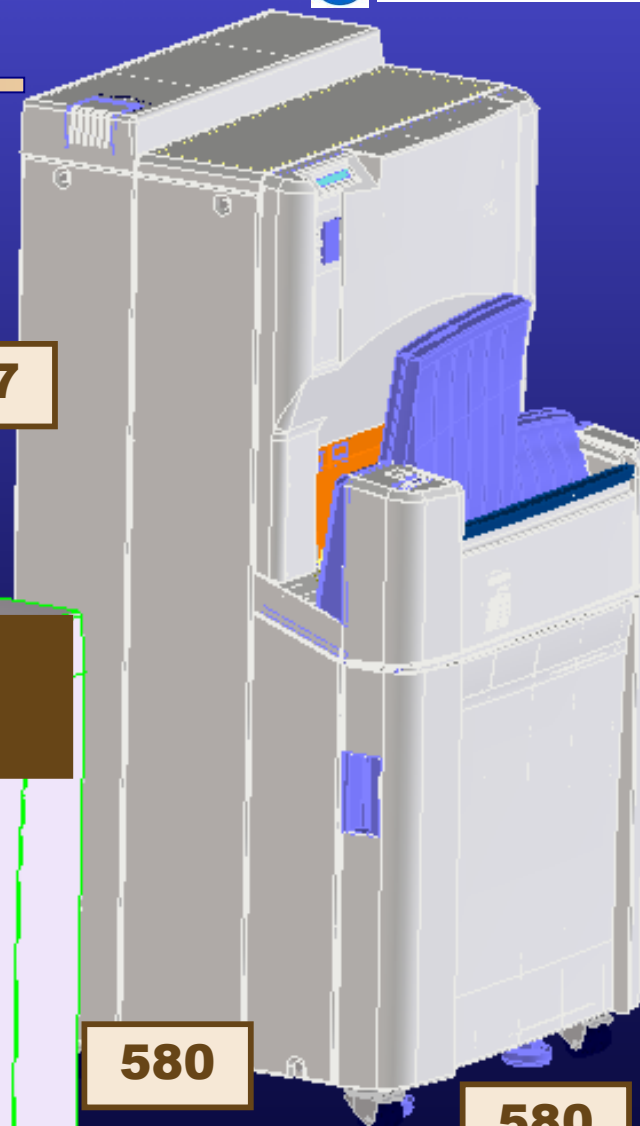
47

580

580

365

740



# Appearance of REGIUS MODEL110





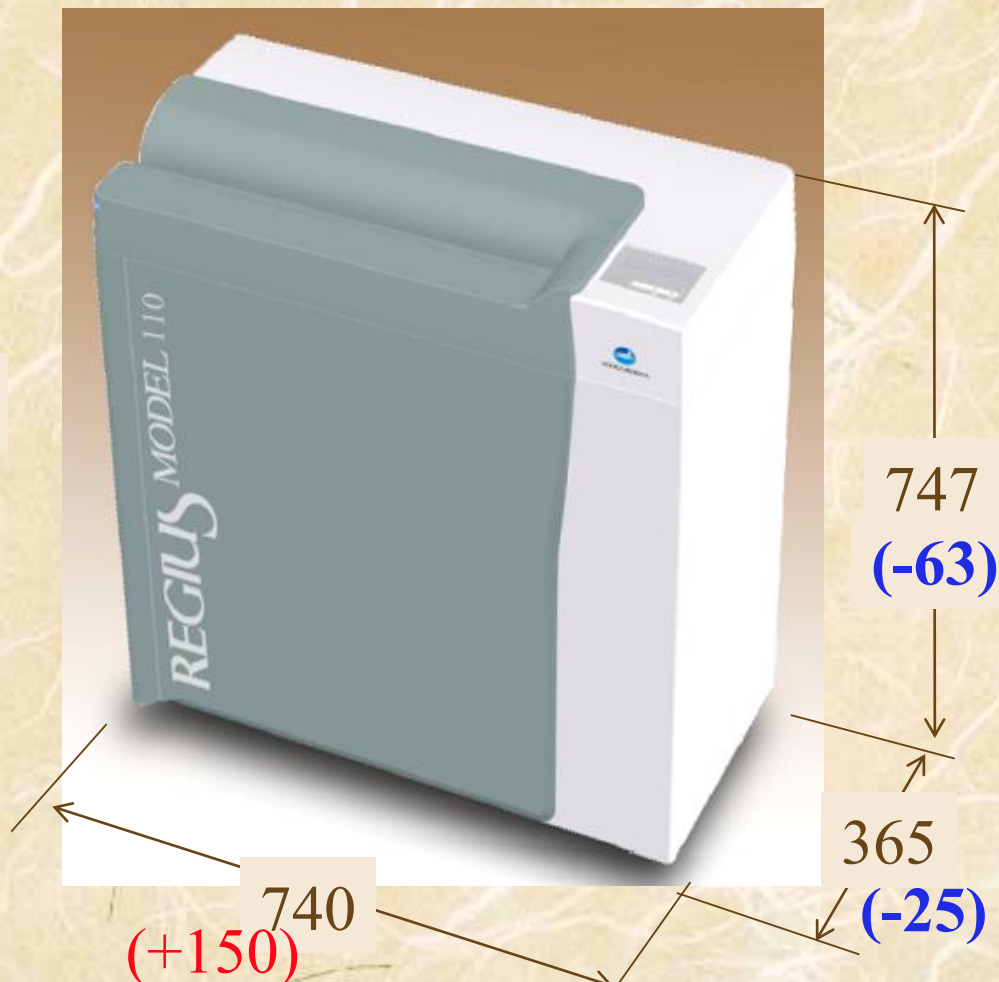
# Comparison

## CARBON X/XL



Footprint: 0.22m<sup>2</sup>

## REGIUS110

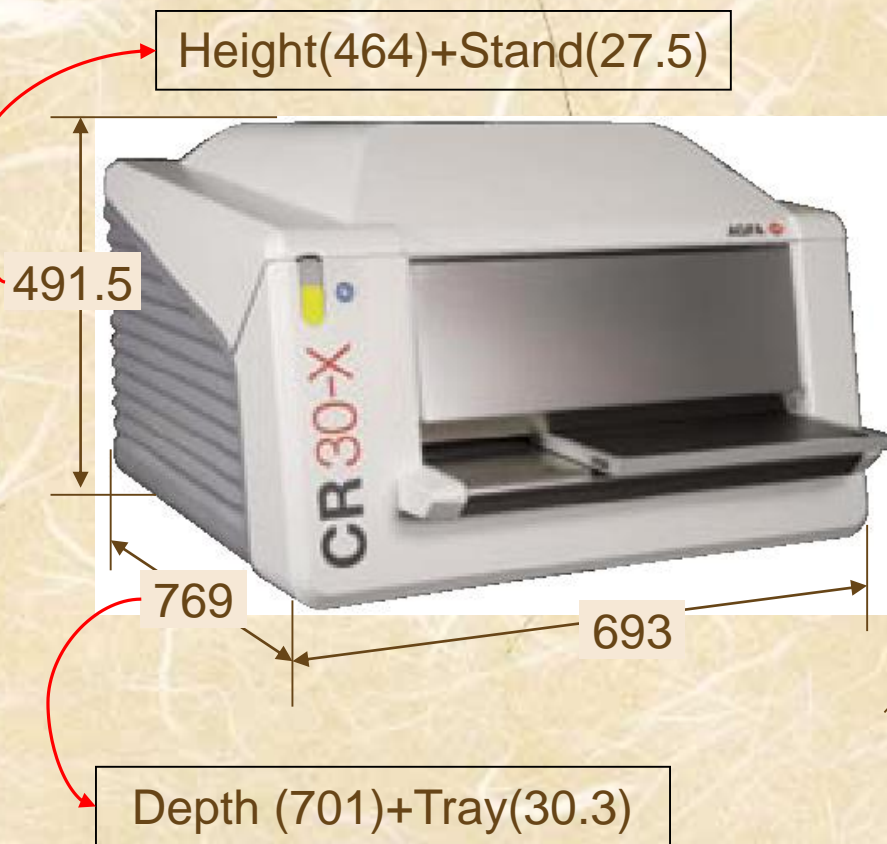


Footprint: 0.27m<sup>2</sup>



# Comparison

## CR 30-X



**Footprint: 0.53m<sup>2</sup>**

## REGIUS110



**Footprint: 0.27m<sup>2</sup>**

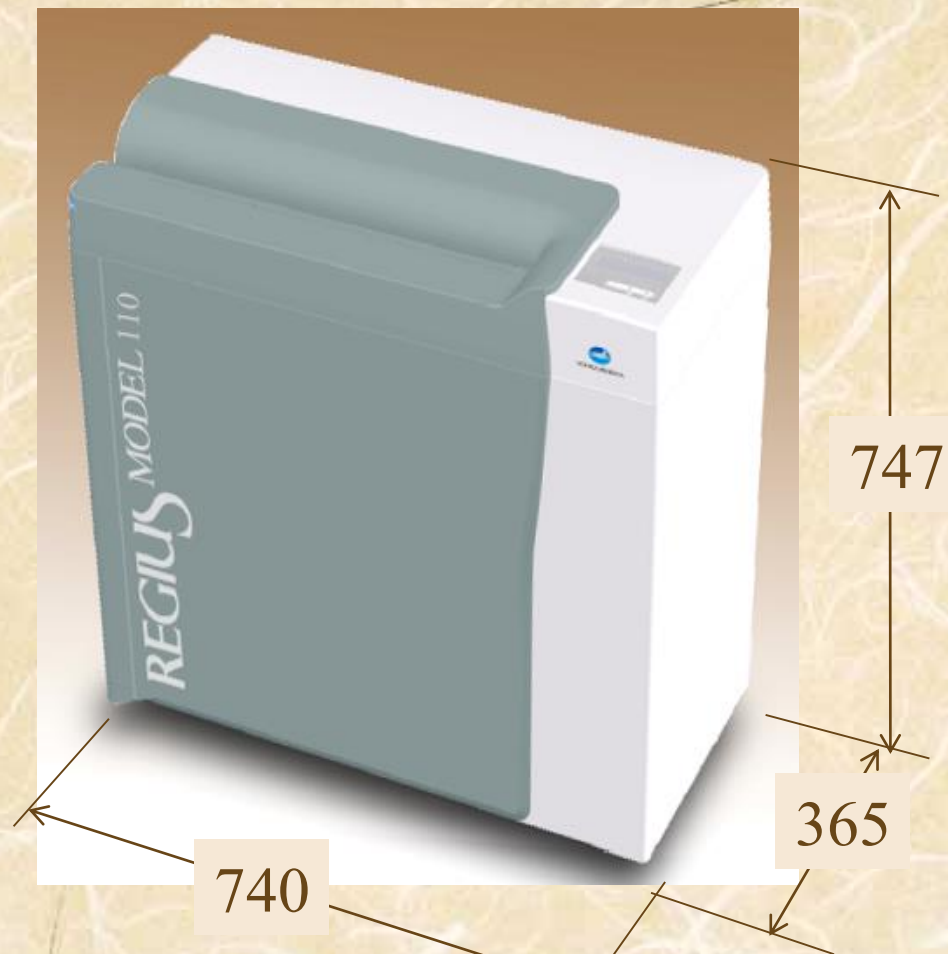
# Comparison

## CR 500



**Footprint: 0.39m<sup>2</sup>**

## REGIUS110



**Footprint: 0.27m<sup>2</sup>**

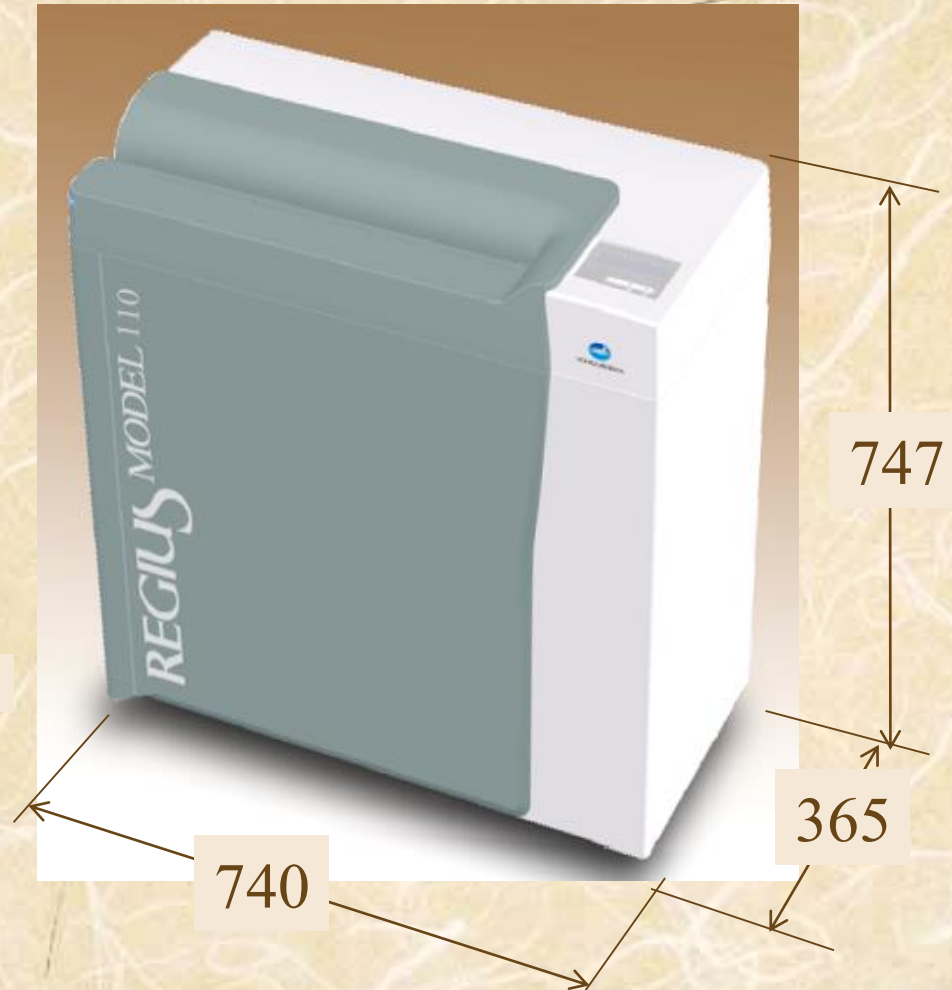
# Comparison

**CR 120/140/260**



**Footprint: 0.48m<sup>2</sup>**

**REGIUS110**



**Footprint: 0.27m<sup>2</sup>**



# Installation space



*We select floor-standing style.*

In the case of the table top, customer needs the space larger than machine foot print in order to install table.

Even if the machine size is small, it is not advantage.

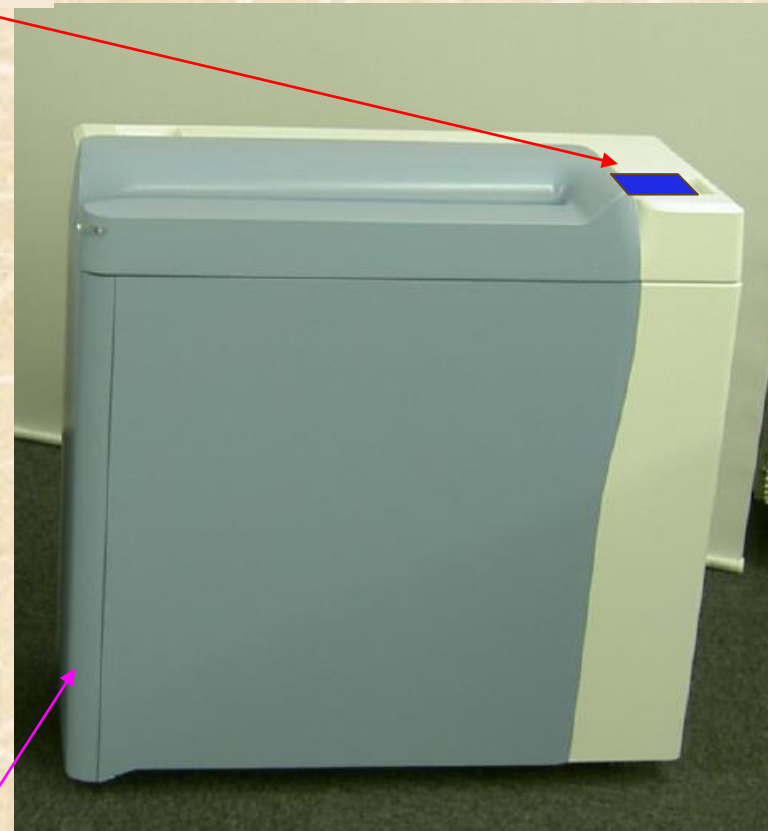
# Feature of REGIUS 110

Flexible placement depending on the installation space.

It is available to switch the location of operation panel depending on the situation .



Sub-front face



Main-front face

Maintenance door



# The height of the machine

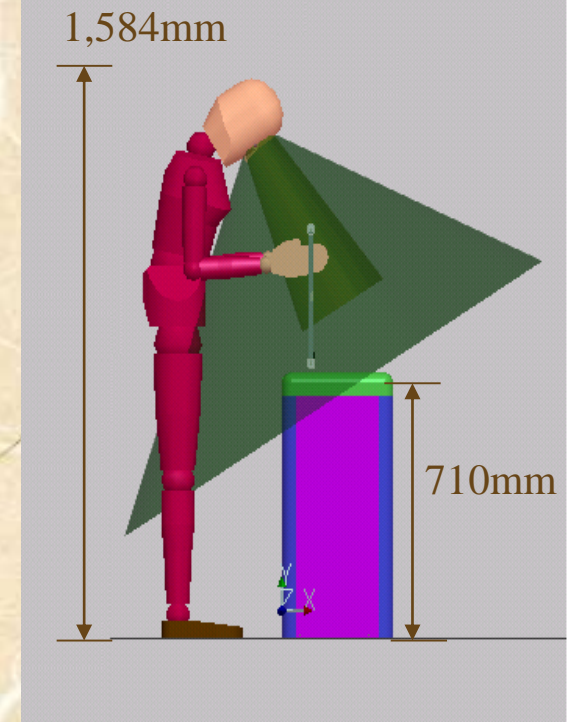
How height is user-friendly for operator?

Even if operator is not tall, operator must insert the cassette easily.

The height of the insertion slot is 710mm (main-front face), 660mm(Sub-front face).



## Position and View

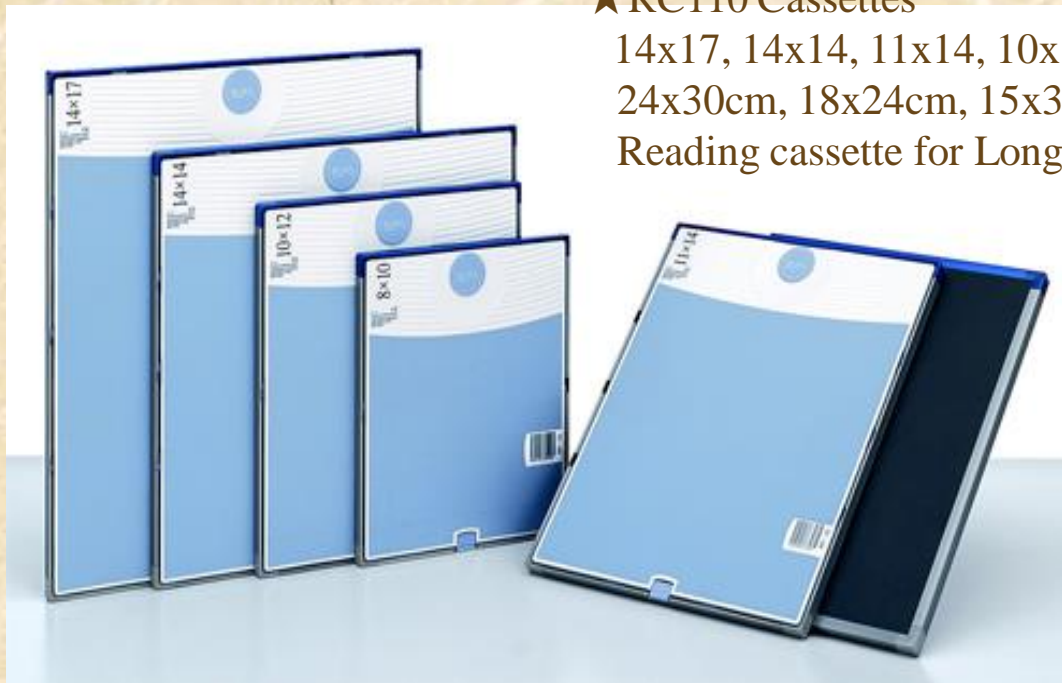


- The height of **CARBON's** insertion slot is 800mm. Customer must lift the cassette up higher every time.



# Cassettes for REGIUS 110

You can use existing cassettes with the REGIUS 110, if customer has REGIUS170/190.



## ★RC110 Cassettes

14x17, 14x14, 11x14, 10x12, 8x10,  
24x30cm, 18x24cm, 15x30cm

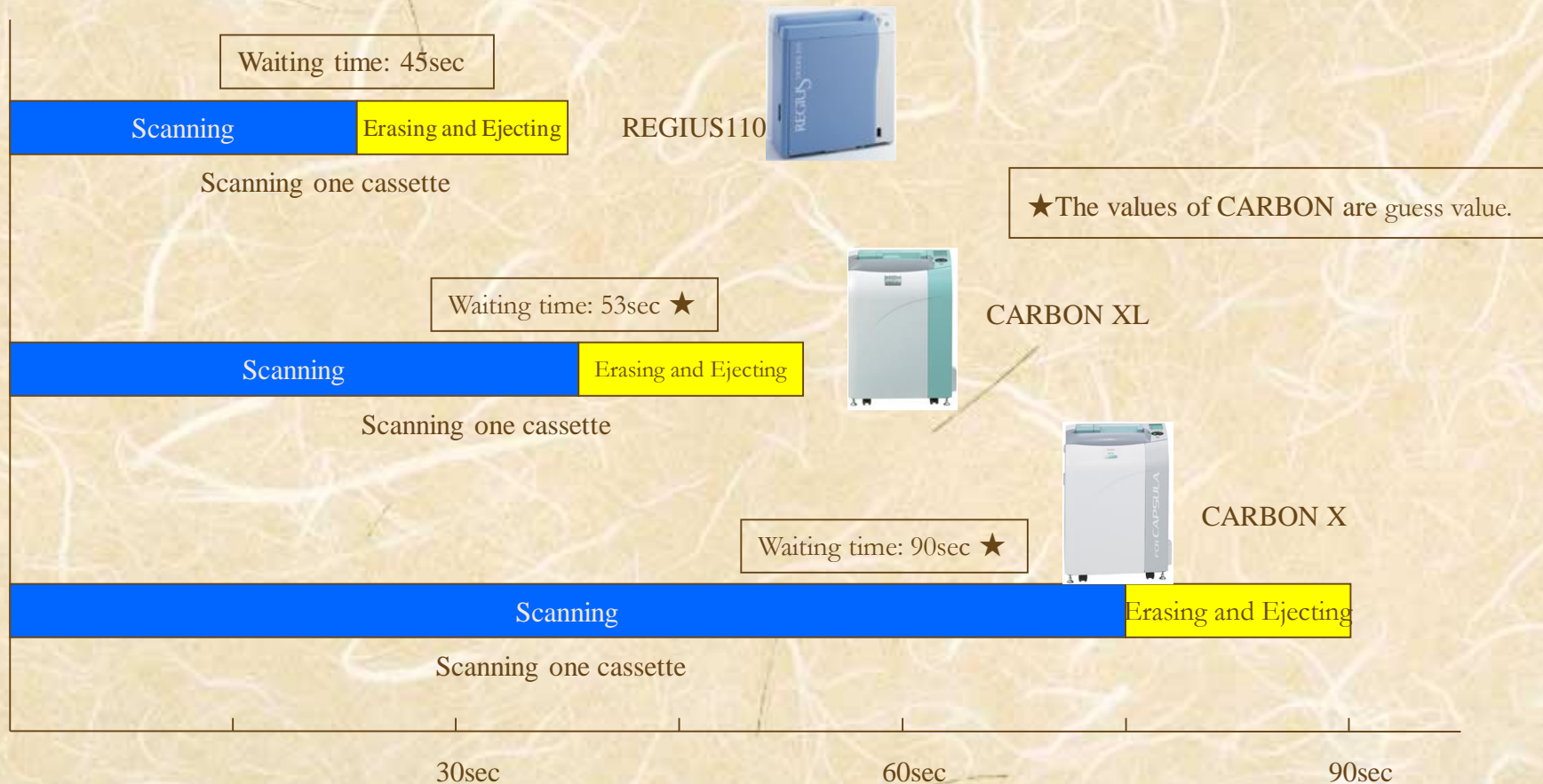
Reading cassette for Long cassette and Radiotherapy cassette

Caution: The cassette which manufactured before May 2004, it is not available with REGIUS110.  
Mammo cassette is not available with REGIUS 110.

# Comparison (Actual value)

REGIUS 110 is one slot CR scanner.

However, REGIUS 110 provide higher performance.





# Response to wrong cassette handling

If customer inserts the cassette to the CR scanner without registration of barcode, customer has to wait until CR refreshed.

**REGIUS 110** need only 3sec. in order to refresh.

**REGIUS 110** can reduce the time for interruption caused by error in operation.



REGIUS110

3sec



XL

28sec

In the case of CARBON, customer has to wait about 30sec. if customer inserts the cassette without registration.

During the Error status, customer cannot do anything.



## ! Review !

1. CARBON have one way for installation.  
It is not suitable for table side installation.
2. The capacity is smaller than REGIUS110.  
And waiting time is two times longer.
3. CARBON is not user-friendly.  
If customer forgets to register the cassette,  
he has to wait about 30sec.
4. Insertion slot is higher.  
If customer is tall, it is no problem.  
But...
5. When customer purchase one CARBON additionally,  
customer has to pay more for the new cassette.

om them.

TR system.

# Comparison chart of CR Scanner

	REGIUS110	CARBON(X/XL)	CR-30X
Installation way	Two way	One way	One way (Table top)
Number of slot	1 slot	1 slot	1 slot
cassettes	14x17, 14x14, 11x14, 10x12, 8x10 24x30, 18x 24, 15x30 *compatible with R170/190	14x17, 14x14, 10x12, 8x10, 24x30, 18x24, 15x30 *New cassette is compatible with existing CR Scanners.	14x17, 24x30, 18x24, 15x30 *Dedicated cassettes
Gray Scale	12 bits	12 bits	16bit
Resolution	175/87. 5μm	200μm/100μm	100μm
Cycle time	45sec (175μm/14x14)	X 72sec (100μm/14x14) XL 38sec (200μm/14x14) 52sec (100μm/14x14)	-
Capacity	80 plates/h (175μm/14x14)	X 50 plates/h (100μm/14x14) XL 94 plates/h (200μm/14x14) 70 plates/h (100μm/14x14)	60 plates/hour (14x17) 71 plates/hour (24x30)
User maintenance	Customer can remove the jammed cassette. Customer can clear up the optical unit. Customer can change the Erase Lump.	Non	Non
Dimension(mm)	W740 * D365 * H747	W590 * D380 * H810	W693 * D769 * H491.5
Footprint	0. 27m <sup>2</sup>	0. 22m <sup>2</sup>	0. 53m <sup>2</sup>
Weight	100kg	99kg	98kg
Power consumption	AC 100/110/115/120/200/220/230 /240V ±10% 50/60 Hz Approx.0.8KVA	110VA、8.8A	Standby 120W / Max 320W



# Comparison chart of CR Scanner

	REGIUS110	CR 500	CR 120/140/260
Installation way	Two way	One way (Table top)	Tow way (Table top / Z-cart)
Number of slot	1 slot	1 slot	1 slot
cassettes	14x17, 14x14, 11x14, 10x12, 8x10 24x30, 18x 24, 15x30 *compatible with R170/190	GP:14x17, 14x14, 24x30, 18x24, 15x30 HR:18x24, 24x30	14x17, 14x14, 10x12, 8x10
Gray Scale	12 bits	12bits	12 bits
Resolution	175/87. 5μm	97 μm	CR120: 8.4 lp/mm, 7.0lp/mm, 5.0 lp/mm CR140: 8.4 lp/mm, 7.0lp/mm, 5.0 lp/mm CR260: 8.4 lp/mm, 5.6lp/mm
Cycle time	45sec (175μm/14x14)	-	-
Capacity	80 plates/h (175μm/14x14)	65 plates/h (14x14)	CR120: 20 plates/h CR140: 41 plates/h CR260: 60 plates/h
User maintenance	Customer can remove the jammed cassette. Customer can clear up the optical unit. Customer can change the Erase Lump.	Non	non
Dimension(mm)	W740 * D365 * H747	H683 x W622 x D650	H340 x W735 x D655
Footprint	0. 27m <sup>2</sup>	0. 39m <sup>2</sup>	0. 48m <sup>2</sup>
Weight	100kg	85.3kg	45kg
Power consumption	AC100/110/115/120/200/220/230 /240V ±10% 50/60 Hz Approx.0.8KVA	100-127 VAC 5Amps 200-240 VAC 3Amps	CR120,140: 200VA 100-240 VAC 2A CR260: 200VA 100-240 VAC 2.5A

# Selections of Console for ERGIUS110

■ You can choose and you can provide suitable console to customer needs.

CS-3

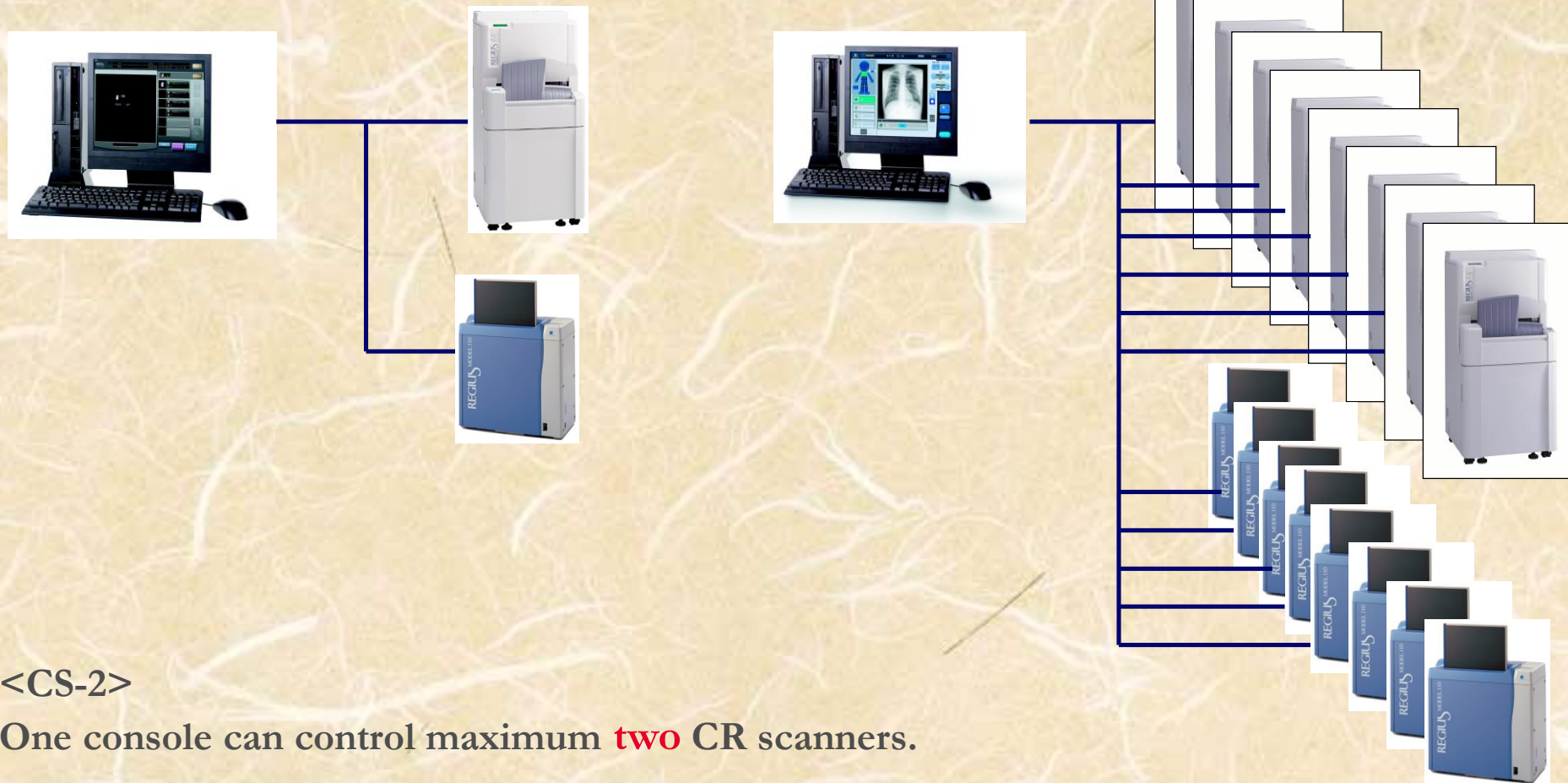


CS-2





# Limitation



<CS-2>

One console can control maximum **two** CR scanners.

<CS-3>

One console can control maximum **sixteen** CR scanners.

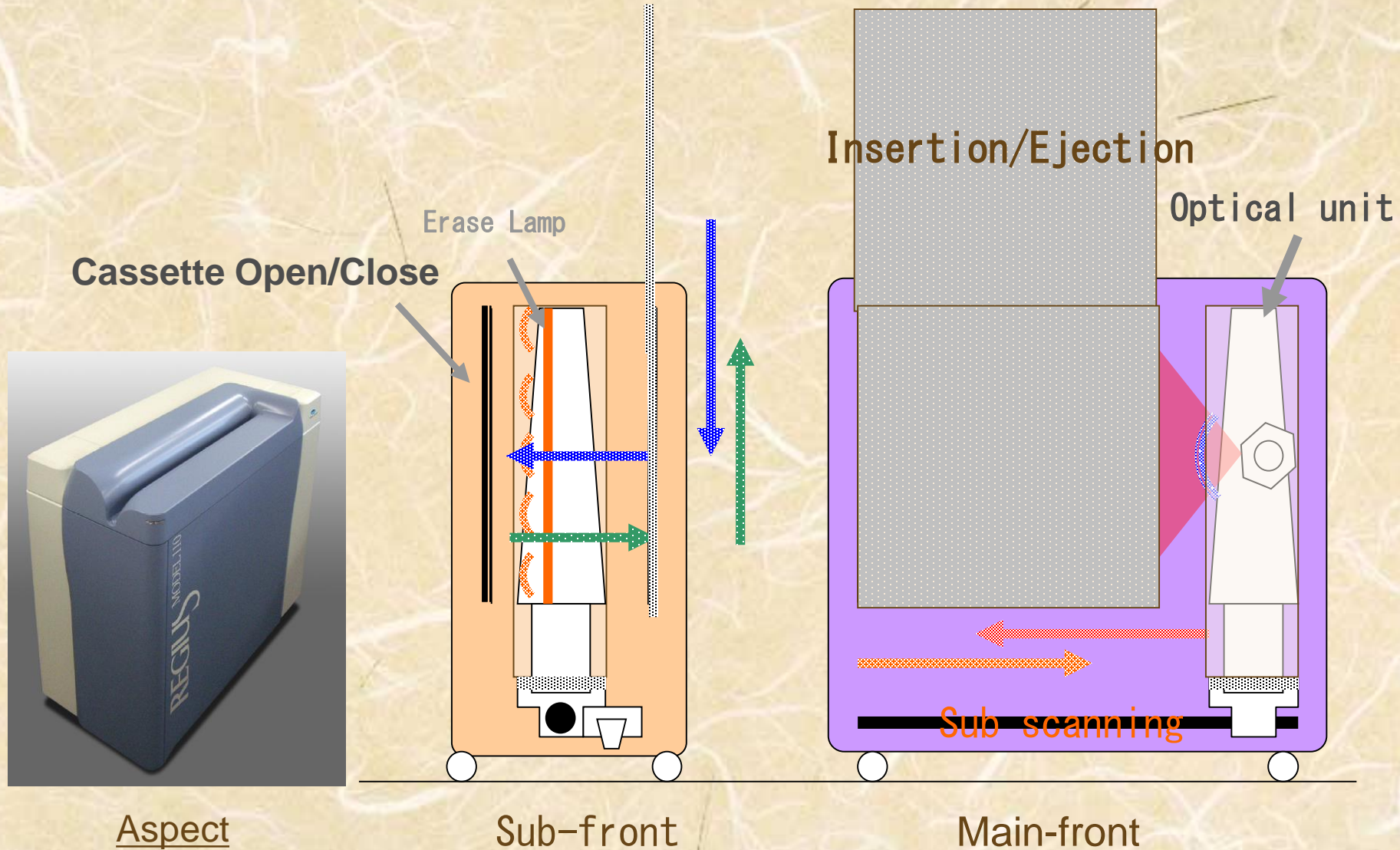
# Prerequisite

No	Configuration	Prerequisite
1	CS-3 REGIUS 110	V2.32R00 or later -
2	CS-2 REGIUS 110	V1.21R00 or later -
3	External JM CS-3 REGIUS 110	V2.32R00 or later V2.32R00 or later -
4	CS-1 REGIUS 170 REGIUS 110	V2.32R00 or later V1.00R09 or later -

**In order to use REGIUS110 with existing machines,  
existing machines must be upgraded to above condition.**

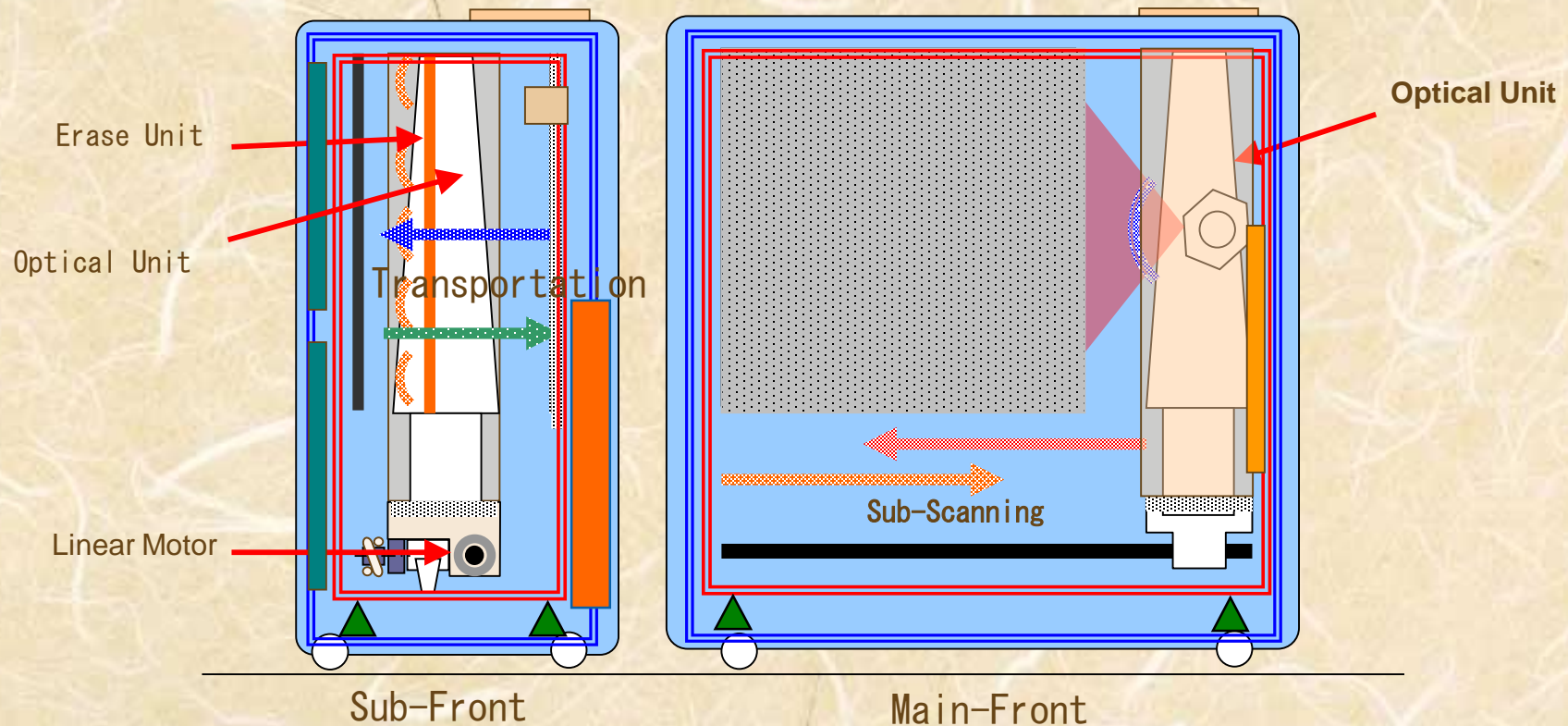


# Mechanical Action



# Original technology for compact design

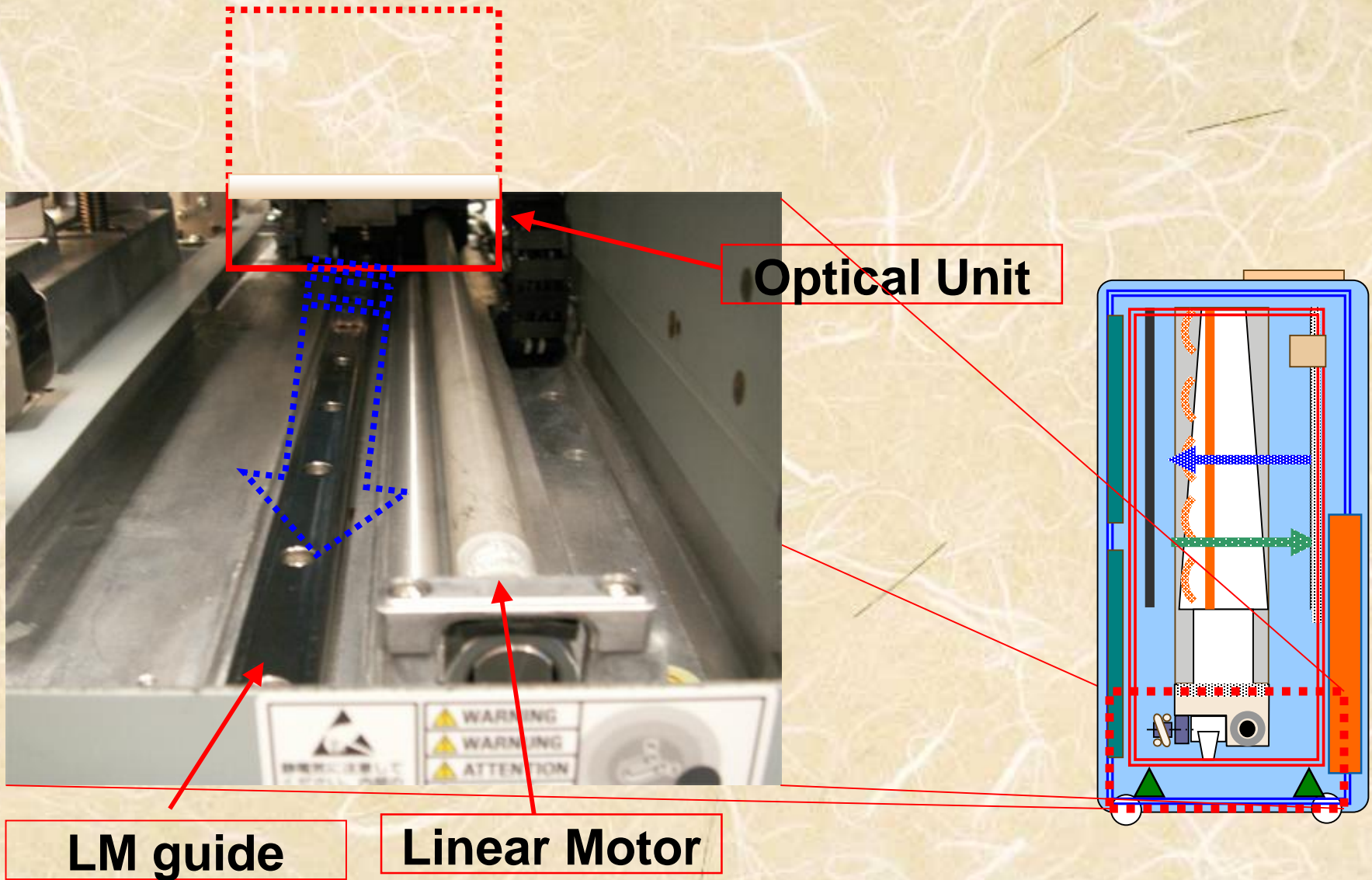
- We have chosen Linear Motor for the transportation of optical unit.  
The Linear Motor provide high stability and smooth transportation.



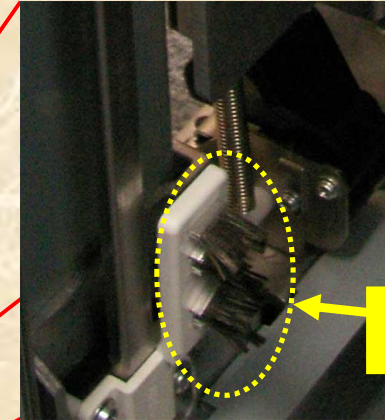
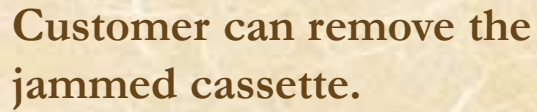
The Linear Motor is novel transfer system from Ball Screw and Belt



# Original technology ... The Linear Motor







Customer can clear up the surface of optical unit.

The brush remove dust etc..

# Original technology ... User Maintenance



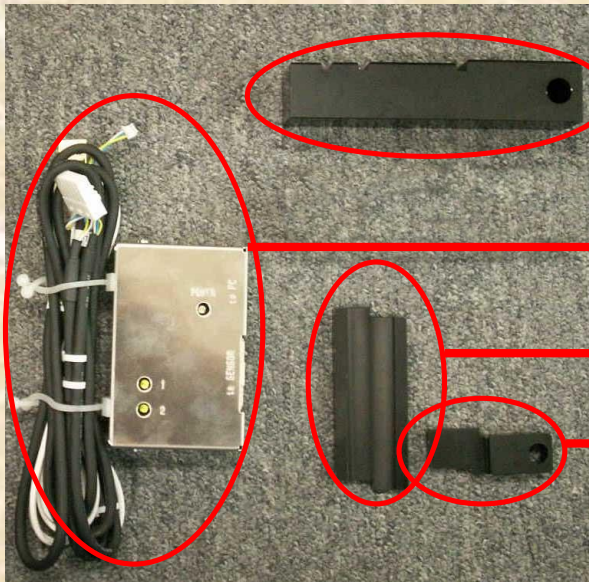
For burn prevention, there is handle in the Erase Lump Kit

**Optical Unit & Erase Unit**

If the Erase Lump burn out, customer can change the Erase Lump to new one without calling a service engineer.



# Tools (Jigs for REGIUS 110)



Jigs especially for ERGIUS 110.

Adjustment block

Sensor status detection jig

Press down size adjusting jig

Interlock release key



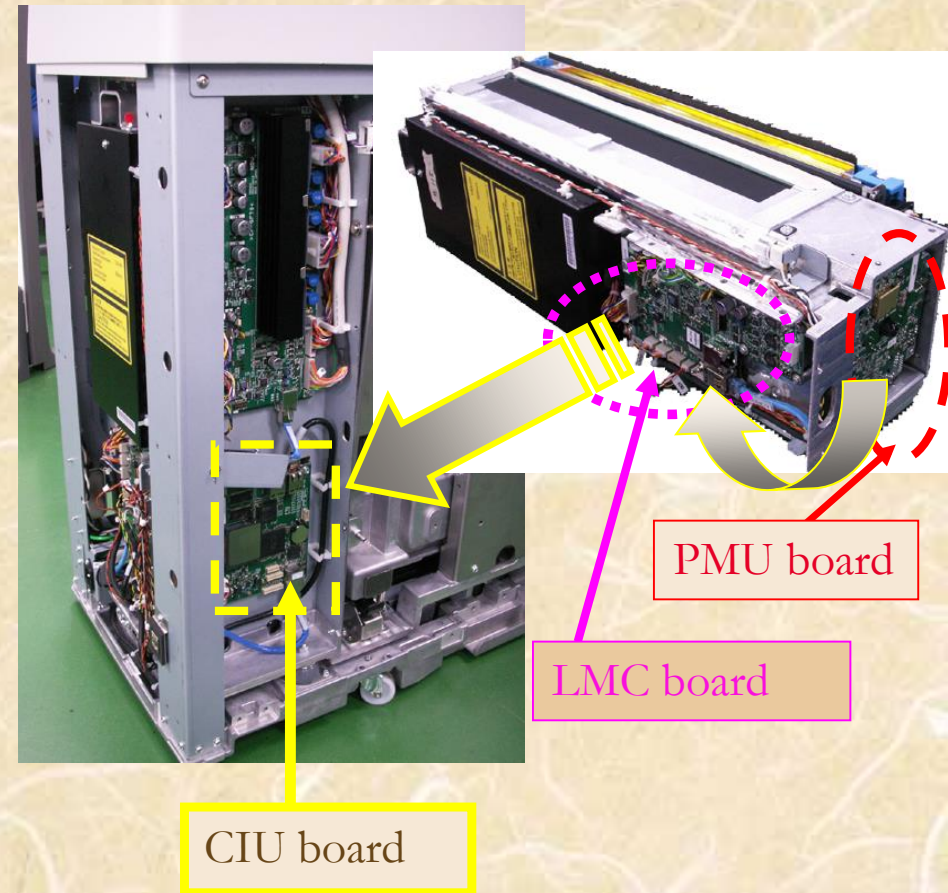
Tension Meter

In the case of REGIUS 170/190, the Dmy SCB program and RS232C cable are needed for checking the mechanical action, and status of sensors.

However, there are no additional tool for checking those, in the case of REGIUS 110. You can check the machine with the service tool via Ethernet.



## REGIUS 110





# Circuit Boards

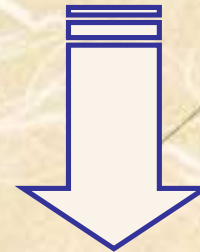
## REGIUS 110



*Analog to Digital*

The distance of line for Analog signal is decreased.  
From PMU to the console, image signal is sent with digital signal.

→ *Degradation of the signal is decreased.*



On this new our product REGIUS 110,  
we realized the cost reduction and the high  
image quality which achieve the same level  
of REGIUS 190.



*LMC board*

*To CIU board*

*To the console*

*Digital Signal*

*End*

